

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

MICHAEL RIVLIN,

Plaintiff,

v.

ZIMMER BIOMET, et al.,

Defendants.

CIVIL ACTION

NO. 19-1497-KSM

MEMORANDUM

MARSTON, J.

August 17, 2021

Plaintiff Michael Rivlin brings negligence claims against Defendants Zimmer Biomet Holdings, Inc.¹ and Biomet Leasing, Inc. for injuries that he sustained while flying from Philadelphia International Airport to Zimmer’s headquarters in Warsaw, Indiana. Defendants have moved for summary judgment. For the reasons discussed below, their motion is denied.

I. Factual Background

A more thorough recitation of the facts is included in this Court’s previous opinion on Defendants’ motion to strike the expert opinion of Marc A. Fruchter. (Doc. No. 42.) As relevant to this opinion, the facts are as follows.²

Rivlin is a board certified, orthopedic surgeon at the Rothman Institute in Philadelphia. (Doc. No. 28-10, Ex. G, Rivlin Dep., at 10:19–11:4.) On the morning of January 21, 2017, he

¹ Zimmer Biomet Holdings, Inc. asserts that it has been incorrectly identified in the complaint as “Zimmer Biomet.” (Doc. No. 27-2 at p. 1.)

² The facts are pulled from the evidence in the record, taken in the light most favorable to Rivlin, the non-moving party. *See Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986) (explaining that at “summary judgment the inferences to be drawn from the underlying facts must be viewed in the light most favorable to the party opposing the motion” (cleaned up)).

flew with four residents and fellows under his charge to attend an elbow instrumentation training program at Zimmer’s headquarters in Indiana. (*Id.* at 32:25–35:25.) There were no flight attendants on board, so once the passengers were seated, Pilot in Command Barry Lintz and First Officer Josh McClintic played a pre-recorded general safety advisory, which instructed the passengers on how to buckle their seatbelts and warned them, “For your added comfort and safety, always observe the seat belt-no smoking signs.” (Doc. No. 27-10, Ex. H, Tr. of Recording; *see also* Rivlin Dep. at 39:18.) Aside from this recorded statement, the pilots did not mention seatbelt use. And although the National Weather Service (“NWS”) had issued an Airmen’s Meteorological Information (“AIRMET”) Tango for moderate turbulence that covered the flight path, the pilots did not warn the passengers about the potential for turbulence during the flight.³

Lintz, Rivlin, and two of the other passengers agree that the weather was clear and sunny when they took off in Philadelphia, and the ride was generally “smooth” up until the incident. (*See* Lintz Dep. at 23:20–21, 24: 7–8; Rivlin Dep. at 39:2, 42:13–15, 45:22–23; Doc. No. 27-9, Ex. G, Miller Dep. at 37:23–38:4; Doc. No. 27-12, Ex. J, Williamson Dep. at 26:16–19; Doc. No. 28-12, Ex. I, Email from Barry Lintz to Tony Collins & Chad Phipps, at p. 3 (“Other than some light turbulence after departure the ride was smooth.”).) Given the smooth ascent and clear conditions, Lintz turned off the seatbelt sign when the plane reached cruising altitude, at around 40,000 feet. (Doc. No. 28-12 at p. 3; *see also* Lintz Dep. at 23:20–24:8.) At that point, Rivlin

³ At 3:45 a.m. EST (8:45 a.m. UTC) on January 21, 2017, the NWS issued an AIRMET Tango for an area stretching across the Eastern United States from New Hampshire to Florida and as far west as Ohio. (Doc. No. 28-8, Ex. E, AIRMET Tango.) The AIRMET Tango warned of moderate turbulence between 24,000 and 40,000 feet (*id.*), and it applied to the time (7:30 a.m. EST) and location (Pennsylvania and Ohio) of the January 21 flight. (*Id.* (stating that the update for turbulence was “valid until 211500,” *i.e.*, 10:00 a.m. EST); *see also* Doc. No. 28-6, Ex. C, Lintz Dep., at 10:19–12:15 (Lintz explaining AIRMET wording).) Lintz testified that it was part of his standard practice to review AIRMETs, like this one, before beginning a flight. (Lintz Dep. at 7:2–8:10, 12:11–15.)

began lecturing his students on how to properly conduct a hand examination. (Rivlin Dep. at 47:20–48:2.) Although he remained seated for most of the lecture, he eventually unbuckled his seatbelt and stood up so that he could walk among the students, using his own hand as a demonstrative. (*Id.* at 41:23–42:9, 43:2–15, 43:25–44:4, 47:20–48:2.)

A little over an hour into the flight, as the pilots began their descent to Warsaw and while Rivlin was still lecturing, the plane suddenly hit severe turbulence at around 36,000 feet. (Doc. No. 28-7, Ex. D, McClintic Dep. at 15:11–18; *see also* Doc. No. 28-12.) One of the students, Dr. Andrew Miller, described the turbulence as creating a “free fall type of effect” that “came out of nowhere,” and he remembers “two separate . . . bumps — drops.” (Miller Dep. at 37:2–22, 39:21–40:2.) At the time the seatbelt sign was off. And with each drop, Rivlin — who was still unbuckled — was thrown into the ceiling, hitting his head and shoulder. (Rivlin Dep. at 43:16–22, 49:16–50:20, 53:16–19; Miller Dep. at 40:7–13.)

Once Lintz regained control of the plane, he turned the seatbelt sign back on (*see* Doc. No. 28-12; *see also* McClintic Dep. at 16:19–17:20, 18:18–20), and Rivlin returned to his seat and buckled his seatbelt. They flew the rest of the way to Warsaw without incident. (Rivlin Dep. at 55:24–56:3, 60:16–18.)

After the flight, Lintz completed a Zimmer Biomet Safety Report (Flight Hazard), in which he gave a detailed description of the turbulence encounter and proposed a “suggested corrective action”:

It is worth the effort when checking the weather to check on Jetstream wind tracks to see where they are located in reference to your route of flight. The turbulence charts depict areas of turbulence but not intensity. In our case there were no Pireps [Pilot Reports] on the enroute center frequencies regarding severe turbulence. I have looked at Pireps given on weather briefings with some skepticism since they are usually old information when you actually get airborne however a little more study of ones that are available along with Jetstream location will be something I pay closer attention too [sic].

....

Also we need to emphasize, especially to new passengers, to keep their seatbelts on at all times unless they need to stand up for some reason. When this event takes place and you are not secured it's almost impossible to totally protect yourself. I intend to include a brief reference to this incident in all my future passenger briefings prior to flight as a way to reinforce getting them to keep their seatbelts on.

(*See* Doc. No. 28-12.)

II. Procedural History

In the weeks following the accident, Rivlin experienced headaches and neck pain, and he ultimately went to the emergency room on February 16, 2017. (Rivlin Dep. at 66:13–67:5, 76:3–12; *see also generally id.* at 75–154.) When his symptoms continued, he filed this action in the Philadelphia Court of Common Pleas on January 16, 2019, asserting negligence claims against Zimmer and Biomet Leasing. (*See* Doc. No. 1.) Defendants then removed the case to this Court. (*Id.*)

At the end of fact discovery, Rivlin submitted the expert report of former commercial pilot Marc A. Fruchter in support of his negligence claims. (*See* Doc. No. 28-14, Ex. K, Fruchter's Initial Report; *see also* Doc. No. 28-16, Ex. M, Fruchter's Supplemental Report.) Defendants moved to strike Fruchter's expert opinion, and the Court granted their motion in part and denied it in part. (*See* Doc. Nos. 42 & 43.) In the admissible portions of his opinion, Fruchter concludes that Lintz should have considered the available upper level wind charts and the AIRMET Tango as part of his pre-flight weather briefing. (*See* Fruchter's Initial Report at p. 6 ("Lintz admitted not checking the jet stream wind tracks for the flight—a gross violation of FAR 91.103.")) And based on these forecasts, Lintz should have anticipated the "significant probability of turbulence over the route of flight," warned the passengers about that turbulence, and advised them to remain seated with seatbelts buckled for the entire flight, and in particular, during the descent. (*Id.*; *see also* July 14, 2021 Hr'g Tr. at 21:13–16, 33:6–10, 80:1–82:4.)

Defendants now move for summary judgment.

III. Standard of Review

Summary judgment is appropriate when the “pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(c). “[T]he mere existence of *some* alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no *genuine* issue of *material* fact.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247–48 (1986). A dispute is genuine if the “evidence is such that a reasonable jury could return a verdict for the nonmoving party,” and a fact is material if it “might affect the outcome of the suit under the governing law.” *Id.* at 248. “[A]t the summary judgment stage the judge’s function is not himself to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for trial.” *Id.* at 249.

IV. Discussion

Defendants argue that summary judgment is warranted because Rivlin “failed to plead an applicable federal standard of care and he is unable to present evidence that the pilots breached a federal standard of care applicable to the flight or otherwise operated the aircraft in a careless or reckless manner.” (Doc. No. 27-1 at p. 5.)

“To establish negligence under Pennsylvania law, a plaintiff must show that ‘(1) the defendant had a duty to conform to a certain standard of conduct; (2) the defendant breached that duty; (3) such breach caused the injury in question; and (4) the plaintiff incurred actual loss or damage.’” *Turturro v. United States*, 629 F. App’x 313, 320 (3d Cir. 2015) (quoting *Pyeritz v. Commonwealth*, 32 A.3d 687, 692 (Pa. 2011)). “In aviation accident cases, federal law preempts

state law on the first of these elements, as federal law provides the standard of care applicable to air safety.” *Id.*; see also *Abdullah v. Am. Airlines, Inc.*, 181 F.3d 363, 365 (3d Cir. 1999) (“[W]e find implied federal preemption of the entire field of aviation safety.”). But state law covers the remaining elements of breach, causation, and damages. *Turturro*, 629 F. App’x at 320; *Abdullah*, 181 F.3d at 365 (“[W]e conclude that, despite federal preemption of the standards of care, state and territorial damage remedies still exist for violations of those standards.”). Defendants argue that Rivlin has failed to put forth any evidence as to the first two elements: duty and breach. We address each argument in turn.

A. Duty of Care

As explained above, federal law, not state law, provides the standard of care applicable to air safety. *Turturro*, 629 F. App’x at 320. Defendants assert that Rivlin has “failed to plead an applicable standard of care,” analogizing this case to two previous opinions from this District, *Margolies-Mezvinsky v. U.S. Air Corp.* and *Bomanski v. U.S. Airways Grp., Inc.* (Doc. No. 27-1 at p. 14.) But *Margolies-Mezvinsky* and *Bomanski* are readily distinguished.

In *Margolies-Mezvinsky*, the plaintiff was struck in the head by a piece of luggage when a fellow passenger opened an overhead compartment at the end of a turbulent flight. No. Civ. A. 98-1526, 2000 WL 122355, at *1 (E.D. Pa. Feb. 1, 2000). She brought a state law negligence claim against the airline, and proposed a state law standard of care. *Id.* at *2. The court granted summary judgment in favor of the airline, reasoning that state law standards of care are inapplicable because “the FAA [Federal Aviation Act] preempts the entire field of airline safety.” *Id.* at *2 (citing *Abdullah*, 181 F.3d at 367). Because the plaintiff did not “set forward any applicable duty that Defendant owes to Plaintiff” under federal law, the court held that “she ha[d] not established one of the basic elements of her claim,” and summary judgment was

warranted. *Id.*

Similarly, in *Bomanski*, the plaintiff alleged that flight personnel acted recklessly or carelessly when they failed to stop a passenger from opening an overhead bin while the plane was parked at the gate and the seatbelt sign was illuminated. 620 F. Supp. 2d 725, 731–32 (E.D. Pa. 2009). Relying on *Margolies-Mezvinsky*, the trial court granted summary judgment for the airline after finding that the plaintiff failed to “specif[y] a pertinent federal regulation applicable to the facts at issue or which would support a finding of negligence under a federal standard of care.” *Id.* at 730. Although the plaintiff referenced 14 C.F.R. § 121.589(b) and (c) in her brief, the court found that those regulations outlined crewmember responsibilities before takeoff. *Id.* at n.7. Because “the injury occurred while the aircraft was still at the gate,” there was still time for the flight attendant to conduct the verification required by those regulations, and therefore, neither one applied. *Id.* That left only the “general duty of care governing an airline’s operation of its aircraft,” which is outlined in 14 C.F.R. § 91.13(a). *Id.* at 730 & n.6. But the court found that “[e]ven applying this general standard . . . Plaintiff has failed to meet her burden” because she makes only “passing reference” to “Federal Aviation Administration laws, regulations, and guidelines.” *Id.*

Here, in contrast to *Margolies-Mezvinsky* and *Bomanski*, Rivlin makes more than “passing reference” to the FAA and its regulations, identifying three specific regulations applicable to Defendants’ conduct. (Doc. No. 28-1 at pp. 2, 11–17.) Specifically, Rivlin argues that under 14 C.F.R. § 91.103, Lintz had a duty to review and consider all available weather information, including the upper air wind charts, before takeoff; that under 14 C.F.R. § 91.519(a)(2), the pilots had a duty to “brief passengers about seatbelts and known moderate turbulence that could have caused injury”; and that, in addition to these specific requirements,

the pilots had a general duty, under 14 C.F.R. § 91.13(a), to avoid operating the plane in a careless or reckless manner, and thus, were required to “keep the seatbelt light illuminated for the duration of the January 21, 2017 flight,” especially during the plane’s descent. (*Id.*) *See* 14 C.F.R. § 91.103 (“Each pilot in command shall, before beginning a flight, become familiar with all available information concerning that flight. This information must include . . . [f]or a flight under IFR or a flight not in the vicinity of an airport, weather reports and forecasts”); *id.* § 91.519(a)(2) (requiring that the pilot in command orally brief each passenger on “when, where, and under what conditions it is necessary to have his or her safety belt . . . fastened about him or her”); *id.* § 91.13(a) (“No person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another.”).

The Third Circuit’s analysis in *Abdullah* is instructive on this issue, as it not only discusses the standard of care applicable in aviation accident cases, but also involved facts similar to those presented here. *See generally* 181 F.3d 363. In that case, the plaintiffs were passengers on a commercial flight from New York to Puerto Rico. *Id.* During the flight, the First Officer noticed a severe weather system developing along the flight path, and he illuminated the seatbelt sign and warned the flight attendants that the ride could become choppy. *Id.* The flight attendants, however, failed to pass this information along to the passengers, and multiple passengers — some of whom were wearing seatbelts, while others were not — were injured when the plane encountered the turbulence. *Id.*

The Third Circuit found that “the FAA and relevant federal regulations establish complete and thorough safety standards for interstate and international air transportation that are not subject to supplementation by or variation among, jurisdictions.” *Id.* at 367; *see also* *Turturro*, 629 F. App’x at 320 (“Aircraft pilots must comply with the duties set forth in the FAR

[Federal Aviation Regulation] provisions, which have the force and effect of law.” (quotation marks omitted)). Therefore, “federal law establishe[s] the applicable standards of care in the field of air safety, generally[.]” *Abdullah*, 181 F.3d at 367. This includes “an overarching general standard of care under the FAA and its regulations,” including 14 C.F.R. § 91.13(a), which requires that no crew member act in a careless or reckless manner. *Id.* at 365, 371. Other, more specific regulations, including “regulations on the use of seatbelts and on the illumination of the ‘fasten seat belt’ sign,” help set “the standard for determining . . . whether [the pilots] operated the aircraft carelessly or recklessly.” *Id.* at 371–72. But even when “there is no specific provision or regulation governing air safety, § 91.13(a) provides a general description of the standard required for the safe operation of an aircraft.” *Id.* at 371; *see also Bomanski*, 620 F. Supp. 2d at 730 n.6 (“When no specific standard of care is referenced, courts have turned to the general duty of care governing an airline’s operation of its aircraft. This duty is specified in 14 C.F.R. § 91.13(a).”); *Allen v. Am. Airlines*, 301 F. Supp. 2d 370, 375 (E.D. Pa. 2003) (finding that the plaintiff’s reliance on § 91.13(a) was sufficient to show that “an applicable, non-specific federal standard pertains generally to his claim,” and “[t]herefore, Plaintiff has distinguished the instance case from such precedent as *Margolies Mezvinsky* . . .”).

Here, because Rivlin has identified the general standard of care set out in § 91.13(a), along with the more specific regulations set out at § 91.103 and § 91.519(a), we deny summary judgment on this ground. (Doc. No. 28-1 at p. 12.) *See Abdullah*, 181 F.3d at 371 (“[I]n determining the standard of care in an aviation negligence action, a court must refer not only to specific regulations but also to the overall concept that aircraft may not be operated in a careless or reckless manner.”).

B. Breach

Next, Defendants argue that “[e]ven if Plaintiff had pled an applicable standard of care, his claims still fail because there is no evidence Defendants breached any duty owed to Plaintiff.” (Doc. No. 27-1 at p. 16.) Specifically, Defendants argue that Rivlin cannot show that Lintz failed to consider all available weather sources as required by § 91.103, or that the pilots failed to give a proper safety briefing as required by § 91.519(a)(2). (*Id.* at p. 20.) Last, Defendants argue that the pilots’ errors, to the extent any exist, are not sufficiently egregious as to constitute “careless or reckless” conduct in violation of the general standard of care set out in § 91.13(a). (*Id.* at pp. 16–20.) We address each argument in turn.

1. Section 91.103

First, Defendants assert that Rivlin “has no evidence that the pilots failed to obtain a proper pre-flight weather briefing pursuant to 14 C.F.R. § 91.103.” (*Id.* at p. 24; *see also id.* at pp. 20–21 (“[T]here is no evidence that the pilots ignored any available weather information indicating the potential for severe clear air turbulence.”).) But Rivlin has submitted the expert opinion of Marc A. Fruchter, who concludes that under § 91.103, Lintz was required to review the upper air wind charts, and failed to do so.⁴ (Fruchter’s Initial Report at p. 6.) Notably, in the safety report that Lintz submitted after the incident, he states that he will “pay closer attention” to the Jetstream wind tracks in the future, an assertion that suggests he did not closely consider the wind charts before the Biomet flight. (Doc. No. 28-13, Ex. J, Zimmer Biomet Safety Report at p. 4.) And during his deposition, Lintz could not remember what he did or did not review in

⁴ In their motion to strike Fruchter’s opinion, Defendants dismissed this conclusion as inadmissible and “speculative *ipse dixit*.” (Doc. No. 27-1 at p. 23.) We disagreed, and for the reasons discussed in our prior Memorandum, held that Fruchter could opine about the types of weather information pilots should consider and a pilot’s ability to anticipate turbulence along the flight path given the available AIRMET Tango and upper air wind charts.

preparation for the flight. (Lintz Dep. at 6:13–19 (Q: “Do you have a recollection of actually getting the flight plan together and preparing for the flight?” A: “I have virtually no recollection of details of that.”).) Taking this evidence together and in the light most favorable to Rivlin, the Court finds an open dispute about whether Lintz failed to consider all available weather information, and thus breached the duty outlined in § 91.103.

2. *Section 91.519(a)(2)*

Second, Defendants argue that Rivlin has “no evidence the pilots failed to provide an appropriate pre-flight briefing on the use of seatbelts.” (Doc. No. 27-1 at p. 25.) They assert that the recorded briefing “specifically addressed the use of seatbelts, instructed passengers to pay attention to the illuminated seatbelt sign, and directed the passengers’ attention to the passenger briefing card.” (*Id.* at p. 26.) And Rivlin has “no admissible evidence establishing” that this information “was in any [sic] deficient in violation of 14 C.F.R. § 91.519.” (*Id.*) Again, we disagree.

Section 91.519(a)(2) states that “[b]efore each takeoff the pilot in command of an airplane carrying passengers shall ensure that all passengers have been *orally briefed* on . . . *when, where, and under what conditions* it is necessary to have his or her safety belt and, if installed, his or her shoulder harness fastened about him or her.” 14 C.F.R. § 91.519(a)(2) (emphasis added). Rivlin argues that the pilots violated their duties under this section when they failed to warn the passengers about the potential turbulence and the need to remain seated with seatbelts fastened throughout the flight. (Doc. No. 28-1 at pp. 17–18.) In support of this argument, Rivlin once again relies on Fruchter’s expert opinion that the pilots’ oral briefing — which merely explained how to buckle the seatbelt and encouraged the passengers to “always observe the seat belt-no smoking signs” — was insufficient because it “would lead a passenger

to believe that when the sign is off, it is ok to move about the aircraft cabin and that there was no risk to their safety while doing so.” (Fruchter’s Supplemental Report at p. 3.) But given the AIRMET Tango and upper wind charts, Fruchter reasons, the pilots should have instead told the passengers about the potential turbulence and “instructed them to at all times possible keep their seatbelts fastened,” particularly during the plane’s descent. (*Id.*; *see also* Fruchter’s Initial Report at p. 6; July 14, 2021 Hr’g Tr. at 20:11–21, 21:13–16, 45:20–23.) In addition to Fruchter’s expert opinion, Rivlin also relies on a 2007 FAA Circular, which encourages crew members to “promptly and clearly communicate turbulence advisories, including specific directions to [flight attendants] and passengers.” (Doc. No. 28-1 at p. 17 (quoting FAA Advisory Circular No. 120-88A, Preventing Injuries Caused by Turbulence, § 9b(1) (updated Nov. 19, 2007).))

Given this evidence in support of Rivlin’s argument, the Court finds that there is an open dispute about whether the pilots failed to give an appropriate pre-flight safety briefing in breach of § 91.519(a)(2).

3. Section 91.13(a)

Last, we find that even if we were to limit our review to the general “careless or reckless” standard outlined in § 91.13(a), Rivlin has shown that there is a dispute of fact as to whether that standard was breached because there is evidence suggesting the pilots’ actions placed the passengers at risk of physical harm.

Section 91.13(a) states, “No person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another.” 14 C.F.R. § 91.13(a). Defendants argue that this Section requires a showing of “egregious behavior” and that Rivlin has put forth no evidence suggesting that the “pilots operated the aircraft in a manner that equates to or even

approaches” egregiousness. (Doc. No. 27-1.) Although Defendants reference multiple cases from this and other Circuits in their briefing, their argument primarily relies on this Court’s discussion in *Allen v. American Airlines, Inc.* — yet another case involving luggage that fell from an overhead compartment. (*See id.* at pp. 16–17, 19–20 (describing the *Allen* case and the “cases relied upon by the *Allen* court”).)

In *Allen*, the court found no evidence that the crew “breached its statutory duty not to operate an aircraft recklessly or carelessly, as nothing supposedly performed, permitted, or ignored by Defendant equates or even approaches the grave, highly endangering actions previously found to have breached § 91.13(a).” 301 F. Supp. 2d at 378 (collecting cases). In its discussion, the court relied heavily on the Third Circuit’s opinion in *Abdullah*, which “recognize[d] that § 91.13(a) should be reserved only for serious, more flagrant pilot misconduct.” *Id.* at 376 (citing *Abdullah*, 181 F.3d at 371). Specifically, the *Allen* court explained that “the § 91.13(a) violation in *Abdullah* was the pilot’s failure to advise passengers to wear seatbelts as the plane fast approached severe turbulence that the pilot knew was of immediate, considerable threat to the passengers.”⁵ *Id.* By contrast, the *Allen* plaintiff’s “plane

⁵ Defendants take great pains to parse out this language in their reply brief, arguing that *Abdullah* is distinguishable because it involved “severe turbulence” that represented an “immediate, considerable threat to passengers.” (Doc. No. 32 at p. 11.) We are not convinced. For one, the “severe” turbulence classification was not itself the issue in *Abdullah*. Instead, the court was concerned with whether the crew’s actions — in that case, failing to avoid the approaching storm system or to advise the passengers to wear seatbelts — substantially endangered the physical safety of the passengers. In light of the immediate risk of severe turbulence, the court answered this question in the affirmative.

And contrary to Defendants’ assertions, § 91.13(a) is not limited to predictions of “severe” turbulence. Instead it focuses on whether the “careless or reckless” conduct at issue “endanger[s] the life or property of another.” 14 C.F.R. § 91.13(a). Evidence in the record before us suggests that “moderate” turbulence, like “severe” turbulence, is capable of causing physical injury to a passenger that is not wearing a seatbelt. The FAA Aeronautical Information Manual (“AIM”) states that passengers experiencing moderate turbulence will “feel definite strains against seat belts or shoulder straps. Unsecured objects are dislodged. Food service and walking are difficult.” (Doc. No. 27-15, Ex. M, AIM at Tbl. 7–1–10.) And Lintz described moderate turbulence as being “bumpy enough that you are more comfortable with your seatbelt on.” (Lintz Dep. at 22:4–11.) Finally, we note that Fruchter’s expert report opines that the difference between “moderate” and “severe” turbulence is not as clear cut as

had landed, and had stopped at the terminal when the accident occurred; there simply was no similar threat of imminent, dire physical injury to Plaintiff and his fellow passengers while their plane sat stationary.” *Id.*; accord 14 C.F.R. § 91.13(a) (“No person may operate an aircraft in a careless or reckless manner *so as to endanger the life or property of another.*” (emphasis added)).

The *Allen* court’s discussion of the facts in *Abdullah* — facts which are remarkably similar to those before us — suggests that this case is precisely the type of case to which § 91.13(a)’s general standard applies. Here, Rivlin argues that the pilots placed the passengers at risk of “dire physical injury” when they failed to consider the upper level wind charts, gave the passengers an incomplete pre-flight safety briefing on turbulence and seatbelt use, and turned off the seatbelt sign despite the strong likelihood of turbulence. (Doc. No. 28-1 at p. 19.) It is uncontested that the pilots failed to warn the passengers about the potential turbulence, and that despite the AIRMET Tango’s warning of moderate turbulence along the flight path, the pilots turned the seatbelt sign off at cruise and left it off for the plane’s initial descent. In addition to these facts, Rivlin puts forth Fruchter’s expert opinion that “turbulence encountered on a flight such as this can cause serious injuries and damage to the passengers, the aircraft, or its contents” in the absence of proper passenger briefings and seatbelt use. (Fruchter’s Initial Report at p. 4.) *See Abdullah*, 181 F.3d at 371 (“[W]hen a jury is determining what constitutes careless or reckless operation of an aircraft, expert testimony on various aspects of aircraft safety may be

Defendants would have us believe:

The classification of turbulence is not a precise exercise. Additionally, as exemplified by this incident, forecast ‘moderate’ turbulence can become ‘severe’ turbulence without warning. However, whether classified as ‘moderate’ or ‘severe,’ turbulence encountered on a flight such as this can cause serious injuries or damage to the passengers, the aircraft, or its contents if proper passenger briefings and appropriate operations are not adhered to.

(Fruchter’s Supplemental Report at p. 4.)

helpful to the jury.”).

Given this evidence, we find an open factual dispute about whether the pilots acted in a “careless or reckless manner so as to endanger the life or property of another.” 14 C.F.R.

§ 91.13(a).

IV. Conclusion

For the reasons discussed above, Defendants’ motion for summary judgment is denied.

An appropriate order follows.